

**CLAIMS**

1. Method for providing plants and/or plant parts  
5 with an identification label, comprising contacting the plant  
or plant part with a product, comprising one or more types of  
tracer molecules, preferably fluorescent tracer molecules,  
and allowing the plant or plant part to take up the tracer  
10 molecules either inside the plant or plant parts or on the  
surface thereof.

2. Method as claimed in claim 1, wherein the  
product is a liquid.

3. Method as claimed in claim 2, wherein contacting  
the plant or plant part with the product is performed by  
15 spraying, immersing, dipping or coating the plant or plant  
parts with the liquid or putting the plant or plant parts in  
a container holding the liquid.

4. Method as claimed in claim 1, wherein the  
product is a powder.

5. Method as claimed in claim 4, wherein contacting  
the plant or plant part with the product is performed by  
dusting with the powder or dissolving the powder in water to  
obtain a liquid that can be used for spraying, immersing,  
dipping, or coating the plant or plant part or can be put in  
25 a container holding the plant or plant parts.

6. Method as claimed in any one of the claim 3 and  
5, wherein the container holding the liquid and the plant or  
plant parts is a vase with water comprising the tracer  
molecules.

7. Method as claimed in any one of the claims 1-6,  
wherein the identification label is intended to show the  
origin of the plant or plant part.

8. Method as claimed in any one of the claims 1-7,  
wherein the identification label is intended to show the date  
35 on which a plant or plant part was cut or harvested.

9. Method as claimed in any one of the claims 1-8, wherein the identification label is intended to show that the plant or plant part was subjected to a treatment.

10. Method as claimed in claim 9, wherein the  
5 treatment is selected from the group consisting of pesticide treatment, treatment for preventing leaf yellowing, treatment to prevent vascular plugging of cut flowers, treatment to prevent ethylene damage, treatment to reduce stem growth, treatment to induce root formation, treatment to induce  
10 flower formation, treatment to extend the vase life of cut flowers, grafting.

11. Method as claimed in any one of the claims 1-8, wherein the identification label is intended to show that nutrients were provided to cut flowers.

15 12. Method as claimed in any one of the claims 1-8, wherein the identification label is intended to show the presence on the plant or plant part of an infection site.

13. Method as claimed in claim 12, wherein the infection is caused by an organism selected from the group  
20 consisting of leaf pathogenic fungi, e.g. *Botrytis*, *Phytophthora*, rust fungi, e.g. *Puccinia*, smut fungi, e.g. *Ustilago*, mildew, e.g. *Erysiphe*, false mildew, e.g. *Mycosphaerella*.

14. Method as claimed in any one of the claims 1-8, wherein the identification label is intended to show that the  
25 plant or plant part was genetically modified.

15. Method as claimed in any one of the claims 1-8, wherein the identification label is intended to show that the plant was vegetatively propagated from a parent plant  
30 carrying the label.

16. Method for identifying a plant or plant part carrying an identification label, consisting of one or more types of fluorescent tracer molecules, comprising visualization of the label with a source of light.

35 17. Method as claimed in claim 16, wherein the source of light is selected from black-light, laser,

optionally used with a filter to enhance specific fluorescence.

18. Method as claimed in claims 16 and 17, further comprising registration of the light emitted by the one or  
5 more fluorescent tracers, for example by means of a camera.

19. Method as claimed in any one of the claims 1-18, wherein the tracer molecule are optical brighteners, such as Photine® CBUS, Photine® D, Photine® PAQ and Photine® CAQ; quantum dots, or compounds selected from the group consisting  
10 of 1,5-naphthalene disulfonic acid disodium salt, 2-amino-1-naphthalene sulfonic acid, 5-amino-2-naphthalene sulfonic acid, 4-amino-3-hydroxyl-1-naphthalene sulfonic acid, 6-amino-4-hydroxyl-2-naphthalene sulfonic acid, 7-amino-1,3-naphthalene disulfonic acid, potassium salt, 4-amino-5-hydroxy-2,7-naphthalene disulfonic acid, 5-dimethylamino-1-naphthalene sulfonic acid, 2,6-naphthalene dicarboxylic acid, dipotassium salt, 2-anthracene sulfonic acid, sodium salt, quinoline, 1-ethylquinaldinium iodide, dibenzofuran sulfonic acid, cresyl violet acetate, bathophenanthroline disulfonic  
20 acid disodium salt, 1-amino-4-naphthalene sulfonic acid, 1-amino-7-naphthalene sulfonic acid, amino 2,5-benzene disulfonic-acid, 1,3,6,8-pyrenetetra sulfonic acid, tetrasodium salt, 8-hydroxy-1,3,6-pyrene trisulfonic acid, trisodium salt, 3,4,9,10-perylene tetracarboxylic acid, bis-  
25 N-methylacridinium, 2-(4-aminophenyl)-6-methylbenzothiazole, resazurin, fluorescein; or fluorescent tracers with CAS registration numbers 2391-30-2, 477-73-6, 1562-90-9, 1829-00-1, 56509-06-9, 16470-24-9, 32694-95-4, 169762-28-1, 144470-48-4, 12270-53-0, 12270-53-0, 61968-72-7, 68444-86-0, 205265-33-4, 37299-86-8, 2321-07-5, 550-82-3, 2538-84-3, 65-61-2, 52237-03-3, 27344-41-8, 6416-68-8 and the ammonium, potassium and sodium salts of said tracers.

20. Plant or plant part carrying an identification label, consisting of one or more types of fluorescent tracer  
35 molecules.

21. Plant or plant part as claimed in claim 20, wherein the fluorescent tracer molecule is as defined in claim 19.

22. Plant or plant part as claimed in any one of the claims 20 and 21, which is subjected to the method as claimed in claims 1-19.

23. Product for providing a plant or plant part with an identification label, which product comprises one or more types of tracer molecules, preferably fluorescent tracer molecules.

24. Product as claimed in claim 23, wherein the tracer molecules are selected from optical brighteners and quantum dots.

25. Product as claimed in any one of the claims 23 and 24, further comprising one or more treatment compounds for pesticide treatment, treatment for preventing leaf yellowing, treatment to prevent vascular plugging of cut flowers, treatment to prevent ethylene damage, treatment to reduce stem growth, treatment to induce root formation, treatment to induce flower formation, treatment to extend the vase life of cut flowers, or grafting.

26. Product as claimed in claim 25, which product is flower food.

27. Product as claimed in any one of the claims 23-26 for use in showing the origin of the plant or plant part, showing the date on which a plant or plant part was cut or harvested, showing that the plant or plant part was subjected to a treatment, showing that nutrients were provided to cut flowers, or showing the presence on the plant or plant part of an infection site.